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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,929	06/24/2003	Lutz Heuer	CH-7669/LeA 35,313	1865

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EXAMINER

DAVIS, BRIAN J

ART UNIT	PAPER NUMBER
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1621

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,929

Applicant(s)

HEUER, LUTZ

Examiner

Brian J. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4 and 8-12 is/are allowed.
- 6) ☒ Claim(s) 3,5-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/24/03;11/1/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear exactly to what set of related compounds applicant wishes to refer by the phrase: "... ammonium chloride *or its related compounds* [emphasis added]...".

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear exactly to what sets of compounds applicant wishes to refer by the phrases: "... distillation residues of tetraethylenepentamine... distillation residues of hexaethyleneheptamine... distillation residues of pentaethylenehexamine."

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear exactly to what set of polyamines applicant wishes to refer by the phrase: "... the group of reaction products of dichloroethane with ammonia and/or amines or from the group of reaction products of ethylene oxide with ammonia or amines."

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Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how variables p and t can be any integer other than 2 (for reasons of coordinative saturation). It is unclear how variable r can be any value other than 1. It is unclear how the nitrogens may be triply or quadruply bonded when formulas (I) and (II) do not encompass a quadruply bonded nitrogen.

Allowable Subject Matter

Claims 1, 2, 4 and 8-12 are allowed. The remaining claims would be allowable once the 112 rejections outlined in this Office Action have been overcome. The following is a statement of reasons for the indication of allowable subject matter:

The closest prior art appears to be GB 1351050, cited by applicant in the IDS, which teaches a process for decolorizing polyethylene polyamines, which comprises distilling the polyethylene polyamine in the presence of a polyethylene polyamine hydrochloride (column 2 line 66). The set of polyethylene polyamines are considered by the author to include ethylene diamine, but more specifically refer to polyethylene polyamines containing the group $-(CH_2CH_2NH)_n-$ (column 1 line 14). The reference neither teaches nor suggests that dibenzylamine, or more broadly, that secondary aromatic monoamines such as dibenzylamine, may be decolorized in such a fashion.

At best, it might have been obvious to try the method of the cited prior art in the decolorization of dibenzylamine, or in the decolorization of secondary aromatic monoamines in general, however, an 'obvious to try' standard is impermissible in two

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situations: 1) where the prior art gives no indication as to which of numerous parameters are critical, or gives no indication as to which of many possible choices is likely to be successful; and 2) where the prior art gives only general guidance with respect to the form of the invention but not how to achieve it new areas of technology or in fields of experimentation which are only seemingly promising. *In re O'Farrell*, 853 F2d 894, 7 USPQ 2d 1673, 1681 (Fed. Cir. 1988). In the instant case, both 1) and 2) apply.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 5,107,024, US 5,321,159 and US 4,709,009 are cited to show related aromatic amine purifications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Davis whose telephone number is 571-272-0638. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 **BRIAN DAVIS**
PRIMARY EXAMINER

Brian J. Davis
April 12, 2005